



west virginia department of environmental protection

Division of Air Quality
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ENGINEERING EVALUATION / FACT SHEET

BACKGROUND INFORMATION

Application No.: R13-2814
Plant ID No.: 039-00606
Applicant: New Cingular Wireless PCS, LLC dba AT&T Mobility (AT&T)
Facility Name: Standard Site
Location: Standard, Kanawha County
SIC Code: 4813
Application Type: "After the Fact" Construction
Received Date: September 10, 2009
Engineer Assigned: Jerry Williams II, P.E.
Fee Amount: \$1,000.00
Date Received: September 10, 2009
Complete Date: October 19, 2009
Due Date: January 17, 2010
Applicant Ad Date: October 8, 2009
Newspaper: *Charleston Newspapers*
UTM's: Easting: 165.81 km Northing: 4,148.88 km Zone: 17
Description: Installation of a 75 hp natural gas and LPG fired generator.

DESCRIPTION OF PROCESS

The following process description was taken from Permit Application R13-2814:

WV616 is a telecommunications facility. A 60Hz generator will provide a maximum power output of 42 kW to utilities at WV616. The generator utilizes a 75 HP gaseous fired spark ignition reciprocating internal combustion engine to provide electricity to various operations at the facility. The fuel may either be natural gas or liquefied petroleum gas (LPG).

SITE INSPECTION

A site inspection was conducted on October 29, 2009 by the writer. This is a new permitting action, therefore the facility was not operating at this time. However, siting conditions appeared to be acceptable for the proposed facility.

Directions as given in the permit application are as follows:

East approximately 1 mile on Paint Creek Road from Standard, WV. Site is located on an existing trail and access easement.

ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

Emissions associated with this permit will consist of one (1) 75 HP natural gas and LPG fired generator. The estimated emission calculations were performed by AT&T and checked for accuracy and completeness by the writer. Maximum emissions from the generator were determined using the worst case of either burning natural gas or LPG. The following tables include the emission source, and controlled emission rate:

Emission Point ID#	Source	Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (tpy)
EP01	75 HP Kohler Generator	Nitrogen Oxides	1.11	4.85
		Carbon Monoxide	6.78	29.69
		Particulate Matter-10	0.01	0.01
		Sulfur Dioxide	0.01	0.01
		Volatile Organic Compounds	0.21	0.94
		Total HAPs	0.04	0.19

REGULATORY APPLICABILITY

Unless otherwise stated WVDEP DAQ did not determine whether the permittee is subject to an area source air toxics standard requiring Generally Achievable Control Technology (GACT) promulgated after January 1, 2007 pursuant to 40 CFR 63, including the area source air toxics provisions of 40 CFR 63, Subpart HH and 40 CFR 63, Subpart ZZZZ.

The following rules apply to this permitting action:

45CSR13 (Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, and Procedures for Evaluation)

45CSR13 applies to this source due to the fact that AT&T exceeds the regulatory emission threshold for criteria pollutants of 6 lb/hr and 10 ton/year.

45CSR22 (Air Quality Management Fee Program)

AT&T is subject to 45CSR22 and must renew their Certificate to Operate (CTO) annually.

The following rules do not apply to this permitting action:

40CFR60 Subpart JJJJ (Standards of Performance for Stationary Spark Ignition Internal Combustion Engines)

The 75 HP generator was manufactured prior to July 1, 2008, therefore, the generator is not subject to this rule.

TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

There will be small amounts of various non-criteria regulated pollutants emitted from the combustion of LPG and natural gas in the generator. However, due to the concentrations emitted, detailed toxicological information is not included in this evaluation.

AIR QUALITY IMPACT ANALYSIS

The facility will not be a major source of HAP's as defined by 45CSR14. Based on the nature of the emissions and the annual emission rate, no air quality impact analysis was performed.

MONITORING OF OPERATIONS

The permittee shall monitor and record the amount and type of fuel consumed and the hours of operation in the Kohler 75HP generator.

RECOMMENDATION TO DIRECTOR

The information provided in the permit application indicates that AT&T meets all the requirements of applicable regulations. Therefore, impact on the surrounding area should be minimized and it is recommended that the Kanawha County location should be granted a 45CSR13 construction permit for their facility.

Jerry Williams II, P.E.
Engineer

Date